

1957

Pioneers in Criminology XIV--Charles Buckman Goring (1870-1919)

Edwin D. Driver

Follow this and additional works at: <https://scholarlycommons.law.northwestern.edu/jclc>

 Part of the [Criminal Law Commons](#), [Criminology Commons](#), and the [Criminology and Criminal Justice Commons](#)

Recommended Citation

Edwin D. Driver, Pioneers in Criminology XIV--Charles Buckman Goring (1870-1919), 47 J. Crim. L. Criminology & Police Sci. 515 (1956-1957)

This Article is brought to you for free and open access by Northwestern University School of Law Scholarly Commons. It has been accepted for inclusion in Journal of Criminal Law and Criminology by an authorized editor of Northwestern University School of Law Scholarly Commons.

The Journal of
CRIMINAL LAW, CRIMINOLOGY, AND POLICE SCIENCE

VOL. 47

JANUARY-FEBRUARY 1957

NO. 5

PIONEERS IN CRIMINOLOGY

XIV—Charles Buckman Goring (1870–1919)

EDWIN D. DRIVER

The author is Assistant Professor of Sociology in the State University of Massachusetts at Amherst. He has been connected with that institution since 1948. His Doctor's Dissertation at the University of Pennsylvania was on "Administrative Control of Deviant Conduct of Physicians in New York and Massachusetts."—EDITOR.



CHARLES BUCKMAN GORING

A budding science periodically requires a sceptic who, being erudite both in the data of the science and in logic, is motivated to assess its alleged theories and to vitalize theory construction. Charles Goring, English psychiatrist and philosopher, possessed this unusual stature in criminology.

Goring was educated at the University of London. He received the B.Sc. in 1895 and the M.D. in 1903. In 1893, he was awarded the John Stuart Mill Studentship in Philosophy of Mind and Logic, and four years later was elected a Fellow of University College. From 1902 until his death in 1919, he was employed as a medical officer in various English prisons.

Under the sponsorship of the British government, Goring, Assisted by other prison medical officers, as well as Karl Pearson and his staff at the Biometrica Laboratory, collected and organized data bearing upon 96 traits of each of over 3,000 English convicts. By a statistical comparison of the distribution of these traits among classes of criminals, and among criminals and non-criminals, he tested and partly refuted the propositions of the Positive and Correctionist Schools of criminology. He also laid the foundation from which a scientific criminology might be constructed. His findings, which are the result of 12 years of diligent study, were published in

1913 under the title, *THE ENGLISH CONVICT*. This work is still the classic example of the application of biometrics to the study of the criminal.¹

This writer, in presenting a résumé of Goring's major contributions to criminology, does so with a reservation: a just appraisal of his ideas requires that each reader personally probe *THE ENGLISH CONVICT*. Several of his contributions are today of interest to sociologists. The use of the statistical method, which Goring emphasized, to discern etiological elements in human behavior is currently fashionable in sociological research. Recent discussions of the conceptions of the criminal² and the relation of these conceptions to theories of criminality³ serve to point up his originality. Goring's discussion of the role of age in the genesis of crime antecedes but closely parallels that of the Gluecks.⁴ The recent work of Clemmer⁵ substantiates Goring's finding that imprisonment is inadequate as a method of reforming the offender. Two other contributions require consideration. His data on the vital statistics and fertility of criminals are interesting *per se* and as a means of bolstering his theory of criminality. Lastly, Goring provides a program of crime control that is logically consistent with his etiological proposition. The reader who follows Goring through the development of these topics is impressed with his scientific imagination, logic and excellent prose. The comment of Karl Pearson is apropos:

The world has yet to realize that achievement in every field is the product of trained imagination alone. Truth in science as in art is not the product of mere computation or careful observation, but of these guided by fertility of imagination. The creative mind has the potentiality of poet, artist and scientist within its grasp, and Goring's friends were never very certain in which category to place him. Perhaps the specification was as difficult and would be as unprofitable as it must ever be in the case of the Florentine, the master spirit of this type of mind.⁶

THE STATISTICAL METHOD

Modern criminologists have generally acclaimed Goring for his critique of Lombroso's conception of the "born criminal type." Yet Goring was quick to stress that he was not opposed so much to Lombroso's findings as to his method of arriving at them. This method—the anatomico-pathological—simply consisted of direct observations by the senses, without the use of measuring instruments, of supposedly abnormal anatomical traits in man. Lombroso defined any marked deviation from the mean value of any trait as an abnormality, or anomaly, and presumed that the degree of moral alienation in men could be inferred from the anomalies stigmatizing

¹ THORSTEN SELLIN. *Charles Buckman Goring*, *ENCYCLOPEDIA OF THE SOCIAL SCIENCES*, edited by E. R. A. SELIGMAN AND A. JOHNSON. New York: Macmillan, 1931, Vol. VI, p. 703.

² PAUL F. TAPPAN. *Who Is The Criminal?*, *AMER. SOCIOLOGICAL REV.*, Vol. XII: 96-102, 1947; FRANK E. HARTUNG. *White-Collar Offenses in the Wholesale Meat Industry in Detroit*, *AMER. JOUR. OF SOCIOLOG.*, Vol. LVI: 25-34, 1950; E. W. BURGESS. *Discussion of Frank E. Hartung: White-Collar Offenses in the Wholesale Meat Industry in Detroit*, *AMER. JOUR. OF SOCIOLOG.*, Vol. LVI: 32-34, 1950.

³ DANIEL GLAZER. *Criminality Theories and Behavioral Images*, *AMER. JOUR. OF SOCIOLOG.*, Vol. LXI, 5: 433-444, March 1956.

⁴ SHELDON AND ELEANOR GLUECK. *JUVENILE DELINQUENTS GROWN UP*. New York: The Commonwealth Fund, 1940, pp. 90-106.

⁵ DONALD CLEMMER. *Imprisonment as a Source of Criminality*, *JOUR. CRIM. LAW, CRIMINOLOG. AND POL. SCI.*, Vol. XLI: 311-319, 1950.

⁶ *Charles Goring, 1870-1919, Obituary Notice and Appreciation*, *BIOMETRIKA*, Vol. XII: 298, Nov. 1918-Dec. 1919.

them. Goring rejected this method on three grounds. First, a science requires precise measurement, and this is not obtained by sense impressions. He admirably demonstrated this by revealing the marked contrast between a composite drawing of 30 imaginative portraits of criminals and that of 30 photographic portraits of criminals. Secondly, Lombroso had, contrary to statistical science, erected differences of kind in treating deviations from the mean value as abnormal rather than unusual phenomena. Lastly, the roughness of the measuring technique provided results that had a low rate of reproducibility. This may account for Tarde's observation that the physical anthropologists were not in agreement with respect to the stigmata of the criminal.⁷

The statistical technique, argued Goring, is the method *par excellence* for the scientific study of the criminal. It permits us to build our knowledge of human beings on foundations as solid and reliable as those of the physical sciences. The conclusions reached by this method are based on steps, which are rooted in logic and explicitly stated, and are independent of the preconceptions of the investigator. However, he was quick to note that the use of this technique necessitates two assumptions.⁸ First, we must assume that the distribution of human traits is not fortuitous but according to the Gauss-Laplacian curve. He felt that this assumption was valid in view of the findings of Quetelet, Galton and Pearson. Secondly, it must be assumed that criminals and non-criminals are qualitatively comparable. The reasonableness of this assumption depends upon whether one accepts the legal or ethical conception of the criminal. The latter, making no distinction between sin and crime, views the criminal as being innately pathological, i.e., an incarnation of original sin. In rejecting this conception, Goring argued that a fine distinction between the immorality of the criminal and the morality of the non-criminal had no basis in fact: the non-criminal also commits breaches of the normative order. Unless, then, there is some specific quality distinguishing crime from other antisocial acts, the difference between criminals and non-criminals is one of degree only. Criminals differ in the fact that their antisocial acts are so grave as to result eventually in conviction and imprisonment by legal authority.

THE CRIMINAL DIATHESIS

In regarding the criminal as a legal fact and crime as merely an extreme degree of antisocial conduct, Goring did not accept the still current presupposition that constitutional factors play no part in a criminal career. He observed that acceptance of this presumption and its corollary, that innately all normal men are mentally and morally equal, resulted by deduction in one of the following propositions: (1) that criminality depends upon the deliberate choice of an individual between good and evil—the classical idea; or (2) the criminal is not a normal man, and his criminality is a product of disease—the Lombrosian notion; or (3) criminality is a traditional

⁷ MARGARET S. WILSON. *Gabriel Tarde*, *JOUR. CRIM. LAW, CRIMINOL. AND POL. SCI.*, Vol. XLV, 1: 7, June, 1954.

⁸ A general discussion of this topic is provided by L. FESTINGER, *Assumptions Underlying the Use of Statistical Techniques*, *RESEARCH METHODS IN SOCIAL RELATIONS* by M. JAHODA, M. DEUTSCH AND S. W. COOK. New York: Dryden Press, 1951, Part II, pp. 713-726.

moral acquisition, produced solely and entirely by misdirected education—the modern deduction. To broaden the range of possible explanations, Goring deemed it mandatory to assume that constitutional as well as environmental factors may be instrumental in criminality:

In other words, we are forced to an hypothesis of the possible existence of a character in all men which, in the absence of a better term, we call the “criminal diathesis”—... a constitutional proclivity either mental, moral or physical, present to some degree in all men, but so potent in some as to determine for them, eventually, the fate of imprisonment.⁹

Therefore, Goring set out to ascertain the association between the criminal diathesis and the environment, training, stock and attributes of the criminal. However, the diathesis, being hypothetical, could not be measured directly. Variations in its presence among men must be inferred from differences among them in the tendency to be convicted and imprisoned for crime. This tendency ranges from non-conviction to frequent and/or prolonged imprisonment. Unfortunately, Goring was unable to compare with respect to every trait individuals occupying the extreme positions because of a paucity of data pertaining to the non-convict population. As an alternative procedure, he compared criminals, grouped according to both their kinds and degrees of criminality. It was assumed that there should be significant differences between criminals convicted of such different offenses as: violence to the person (assault), damage to property (mainly arson), stealing and burglary, sexual offenses and fraud. Two scales were employed to express degrees of criminality. One was based upon the frequency of conviction during the total life span, and the other, which was to portray the gravity of the offender’s acts, was based upon the ratio of years of imprisonment to years of freedom for an offender after his first conviction. Striking here, as elsewhere in his work, is the lucid manner in which Goring makes explicit the basis for this procedure:

Assuming that conviction and reconviction for crime are not purely circumstantial occurrences, and constitutional factors play some part in this eventuality, it is a reasonable presumption that, whatever may be the ultimate nature of the criminal diathesis, increasing frequency of conviction to, and increasing periods of detention in, prison, should vary directly with increasing intensities of this diathesis, and, consequently, if this inward potentiality for committing, and being apprehended and convicted of crime, which we call the criminal diathesis, were reflected by outward signs, it is reasonable to suppose that progressive changes in physical attributes would be associated with progressive changes in frequency of conviction to, and length of confinement in, prison.¹⁰

STIGMATA AND CONSTITUTION OF THE CRIMINAL

Goring’s examination of the relations of 37 physical and 6 mental traits to criminality led him to reject the claims of Lombroso and other criminal anthropologists that there are specific stigmata characterizing the criminal.

Physical Traits

Of the 37 physical traits, only 6 of them, when correlated with type of crime, yielded coefficients above 0.15. Further, the mean value (0.107) of the coefficients for the

⁹ CHARLES GORING. *THE ENGLISH CONVICT: A STATISTICAL STUDY*. London: His Majesty’s Stationery Office, 1913, p. 26.

¹⁰ *Ibid.*, p. 123.

whole series of traits differed only slightly from the value of a pure chance relationship (0.075). As far as degree of criminality was concerned, Goring found that it was independent of the few traits considered: stature, distance between the eyes, head circumference, weight, and cephalic index. One significant difference was found in the distributions of cephalic, hair and eye color, defective hearing, nose conformation, and left-handedness among criminals and non-criminals (consisting of such diverse groups as: Cambridge, Oxford, and Scottish students; British and Scottish school-boys; University of London professors; Scottish insane; German army recruits; and British Royal Engineers). The criminals differed from the Engineers in having slightly smaller horizontal contours (of the head), and in the tendency of their contours to decrease with increasing age. Throughout his examinations, Goring corrected for differences between his groups in age, stature and intelligence-factors which were positively correlated with physiognomy.

The correlation of physical attributes with physique rather than criminality did not lead Goring to deduce that criminals and non-criminals were co-equals in physique. However, he felt that a valid comparison of their physiques required that class and occupational differences be controlled.

The mean stature of the criminal, like that of the non-criminal sections of the community, depends greatly upon the social class from which individuals belonging to particular sections have been drawn, and is also determined by the extent to which they have been selected by stature, for the occupancy of any section. Thus, the mean stature of policemen is greater than that of citizens generally, because citizens of small stature are not eligible for the police force; and commissioned army officers are taller on the average than non-commissioned officers, because of the different social classes from which these two types of soldiers are respectively selected; and, again, the labourer is taller than the artisan, probably because only individuals with good physical development can earn a livelihood by performing heavy manual labour.¹¹

Consequently, the physique and constitution of the groups were compared after they had been arranged in four social classes and seven occupational classes. Goring found criminals, with the exception of those convicted of fraud, to be inferior to the general population in stature and weight. With respect to health and constitution (determined by the degrees of muscularity and obesity), violent offenders were stronger and more sound constitutionally, and thieves and burglars (90 percent of the total criminal group) were puny in build as compared with both the total criminal group and the general population. Except for these relationships, neither type of crime nor degree of criminality was found associated with stature, weight, health, muscularity or obesity. These, stated Goring, "are the facts: and according to our inquiry, the sole facts at the basis of *criminal anthropology*; they are the only elements of truth out of which have been constructed the elaborate, extravagant, and ludicrously uncritical criminal doctrines of the great protagonist of the 'criminal type' theory."¹²

In explaining the physical inferiority of the criminal, Goring stressed the dual selective processes, previously mentioned. Physique is a factor in that the physically unfit would have less chance of escaping the clutches of the law. It is not, however, the sole factor. If it were, for example, that only short men can function as pick-

¹¹ *Ibid.*, p. 175.

¹² *Ibid.*, pp. 200-201.

pockets, then everywhere the stature of the criminal would be the same. This is not the case as shown by the marked contrast between English criminals and those of Scotland and New South Wales (Australia). Therefore, selection by class is also a factor.

Convicted parents, selected from the general community, as already explained, by inferior stature, have sons, who, while tending to be similarly convicted, inherit the diminutive stature of their fathers. Here, we have the conditions which in the course of generations would lead to an inbred physical differentiation of the criminal classes.¹³

Mental Traits

In order to determine the role of mental stigmata in criminality, Goring measured the associations of kinds and degrees of criminality with the factors of: temperament, temper, facility, conduct (behavior while imprisoned), suicidal tendency (measured by number of attempted suicides), and insane diathesis (determined by previous confinements in an asylum). It was found that fraudulent offenders were somewhat egotistic, and violent offenders were marked by hot and violent temper, lack of facility, and insane and suicidal tendencies. Any other differences between the convicts depended entirely upon their differences in general intelligence.

It is with respect to intelligence that criminals are most differentiated from the general community. On the basis of his data and a report of a Royal Commission survey in 1908, Goring discovered a high association ($r = 0.6553$) between criminality and defective intelligence. Thus, he concluded, "English criminals are selected by a physical constitution, and a mental constitution, which are independent of each other"¹⁴—that the one significant physical association with criminality is a generally defective physique; and that the one vital mental constitutional factor in the etiology of crime is defective intelligence."¹⁵ Later, Goring added moral defectiveness as the third constitutional factor in order to account for the conduct of some serious offenders who were neither physically nor mentally inferior.

AGE AND CRIMINALITY

To buttress his argument that defective intelligence is one of the primary sources of criminality, Goring pointed to the age structure of criminals. Star-class (non-habitual) criminals, whom he considered as only one step removed from the general community in terms of the diathesis, were very similar to the general community in age structure. On the other hand, habituals had a mean age of 22 years (S.D. 9 years) at the time of first conviction, whereas in the general community the mean was 37 years (S.D. 17 years). He dismissed the ideas that the tendency of habituals to be convicted at young age was due: to a tendency in society to more severely punish young persons; or to young persons being more criminally disposed; or to special environmental factors associated with age. Rather, an "individual's selection for conviction by age must be sought in the particular conjuncture of opportunity

¹³ *Ibid.*, p. 200.

¹⁴ By Goring's computation, the correlation coefficient for physique and intelligence is 0.02 ± 0.03 , *Ibid.*, p. 263.

¹⁵ *Ibid.*, p. 263

to commit crime with the intensity of the criminal predisposition—a conjuncture which obviously is highly correlated with age.”¹⁶

By the analogy of the onset of scarlet and enteric fevers, he attempted to prove this point. Both fevers are of environmental and constitutional origin. The onset of either results when there is the invasion of the body of infectious agents (the environmental factor) plus the presence of bodily tissues which favor its development. The infectious agents of scarlet fever are omnipresent but those of enteric are more easily avoided. From the point of birth, the individual is susceptible to either. The age structures of the fevers show that those who succumb do so at an early age. The mean and mode of scarlet fever are 5.26 years and 8.61 years, respectively; they are 13.39 and 18.97 for enteric. Goring attributed the difference in age structures to variations in the environmental stimulus, and considered the youth of victims of both diseases as evidence that constitutional traits manifest themselves at the earliest possible moment. The mean and mode of criminality (from the point that conviction for crime was possible in England—12 years of age) were 10.07 years and 13.31 years. His “conclusion, upon the age distribution of first offenders, is that some mental constitutional proclivity is . . . the primary source of the habitual criminal’s career.”¹⁷

SOCIAL FACTORS AND CRIMINALITY

Goring dismissed the claims of Lacassagne, Ferri, and others that the genesis of criminality lay in social factors. He found that type and degree of criminality had no positive association with the factors of: nationality; education, as measured by either the length of schooling or achievement in school; regularity of employment prior to first conviction; order of birth in the family; and the broken home. Alcoholism was correlated only with crimes of personal violence ($r = 0.20$).

He did observe that types of crime appeared to be related to certain occupations and social classes. For example, people convicted of damage to property and sexual offenses were most often agricultural laborers, miners and seamen, whereas those convicted of acquisitive crimes were usually from the commercial and artisan groups. However, Goring felt that type of occupation did not induce criminality but rather different occupations present dissimilar opportunities for committing a particular crime. Among the social classes there was a predominance of: crimes of violence, stealing and burglary in the lower class; sexual offenses in the poor and destitute classes; and fraud in the middle and upper classes. However, when stealing, burglary and fraud were grouped together as acquisitive crimes, the association of class position with crime almost completely disappeared. The upper class, constituting 4 percent of the general community, was responsible for 3 percent of these offenses. In view of this and the fact that 95 percent of all convictions were due to acquisitive crimes, Goring felt that poverty was of minor importance in criminal conduct.

VITAL STATISTICS AND MARITAL CONDITION OF CRIMINALS

The vital statistics of the criminal are important *per se* and in relation to Goring’s theoretical position. If criminality was due to the inheritance of a defective con-

¹⁶ *Ibid.*, p. 212.

¹⁷ *Ibid.*, p. 214.

stitution, then, provided that there were no abrupt changes in the social structure, the size of the prison population in this generation should approximate the fertility rate of criminals during the past generation. He substantiated this proposition by pointing out that the prison population of England had remained constant from 1882 to 1901 (despite an increase of 20 percent in the general population), and that criminals had just about replaced themselves. Out of 1000 male offenders, 629 married and had an average of 3.50 offspring.

There were slight variations in the marriage rates of offenders, convicted of different kinds of crimes, from the rate in the general community (621/1000 males). In his explanations of two of these variations one finds ideas that have been confirmed, in part, by recent studies.¹⁸ "An excess in the marriage rate of fraudulents is attributed to the stress of marriage in inducing fraud; an excess of 7.6 percent in the marriage rate of violent crimes represents the extent to which criminals committing this crime are indicted for committing violence upon their wives . . ."¹⁹

An examination of the morbidity and mortality rates of criminals convinced Goring that there was no substance in Lombroso's claim that disease was a factor in criminality. Comparing the sickness rate of the general community with that of convicts, he found that criminals were slightly less affected by illness. Certain types of disability were, however, differently distributed among the two populations. Strong, positive associations exist between criminality and insanity ($r = 0.44$), epilepsy ($r = 0.26$), and syphilis and venereal diseases ($r = 0.31$). On the other hand, as shown by their correlation coefficients, chronic diseases militate against the commission of crime: chronic heart disease ($r = -0.13$), cancer ($r = -0.11$), and chronic bronchitis ($r = -0.12$). In similar manner the mortality of criminals and non-criminals from these conditions differed. But, their general mortality rates were approximately equal.

HEREDITY VS. INTIMATE ASSOCIATION

Goring presented an exceedingly cogent rebuttal of the theory that "intimate association" accounts for the close resemblance between individuals and their parents ($r = 0.60$) and their brothers ($r = 0.45$) in criminality. If the high correlations were the result of individuals having associated with a corrupting influence, then, "we would expect in certain circumstances the prevalency of crime to be increased by marital condition."²⁰ On the surface, the correlation of 0.6378, representing the association of criminality in one parent with criminality in the other, seemed to bear this out. However, he argued, in view of the fact that the modal age of criminality was about six years lower than that of marriage, the correlation was to a considerable extent the result of assortative mating. Further, if contagion were the factor, we would have to presume that criminal wives are four times as infective as criminal husbands to explain why every other female criminal had a criminal husband but only one out of eight criminal males had a criminal spouse. He felt,

¹⁸ V. PETERSON, *Why Honest People Steal*, *JOUR. CRIM. LAW AND CRIMINOL.*, Vol. XXXVIII: 94-103, July-Aug. 1947; KAARE SVALASTOGA, *Homicide and Social Contact in Denmark*, *AMER. JOUR. OF SOCIOLOGY*, Vol. LXII, I: 37-41, July, 1956.

¹⁹ Goring, *op. cit.*, p. 334.

²⁰ *Ibid.*, p. 365.

therefore, that the correlation indicated assortative mating augmented by the restrictions imposed upon the criminal female in choosing a husband.

Other evidence convinced Goring that criminality was more bred in the home than inoculated there. There was not much greater similarity between parents and their offspring in the types of the crimes where learning should be most necessary than in those where it should be least important. The parental correlations for professional crimes (stealing, burglary and fraud) ranged from 0.48 to 0.58, and those for damage to property and sexual offenses were 0.45 and 0.50, respectively. He deduced that the influence of criminal contagion was from 0.05 to 0.1. Goring computed in another way the influence of contagion. "Assuming the influence of paternal and maternal inheritance to be equal, an excess in the correlation coefficient (in crime) of one parent over the other, should express the minimum value for the influence of contagion. The difference, averaging about 0.05, corresponds to the minimum value, given above."²¹ Lastly, he found that early removal of a delinquent child from his home did not increase the probability of his reformation.

CONTROL OF CRIMINALITY

Goring felt that criminality could be drastically reduced through legislative enactments that gave appropriate consideration to the importance of constitution, opportunity, and reproduction in criminality. He argued that the inherited tendency to commit crime might be modified by educational measures. This tendency, like others, must be nurtured; therefore, despite the low correlation of education with criminality, there was no reason for presuming that the general standard of morality could not be raised by training. The opportunity to commit crime might be modified by segregation and supervision of the unfit. He felt, however, that confinement was purely ameliorative because recidivism was not lessened by imprisoning rather than fining first offenders. The real cure, as he saw it, lay in the regulation of the reproduction of those traits associated with the diathesis, namely: feeble-mindedness, epilepsy, insanity, and defective social instinct.

EVALUATION

Soon after its publication, Goring's work aroused heated controversy. Its supporters argued that it dealt the lethal blow to Lombrosian doctrine whereas its opponents saw in it a vindication of Lombroso. The former view is that which predominates today among United States criminologists. Unfortunately, in their preoccupation with Lombroso and by their intellectual predisposition to reject biological explanations of criminality, they have glossed over two aspects of Goring's work. First, Goring, like Lombroso, stressed the role of biological factors. Secondly, some of the shortcomings of "The English Convict" make moot the proposition that it constitutes a refutation of Lombroso's peculiar biological theory.

The following criticisms are presented by several investigators:²²

²¹ *Ibid.*, p. 367.

²² *Charles Goring's The English Convict: A Symposium*, *JOUR. OF CRIM. LAW AND CRIMINOL.*, Vol. V: 207-240, 348-363, 1914-1915; BRYAN DONKIN. *Notes on Mental Defect in Criminals*, *JOUR. OF MENT. SCI.*, Vol. LXIII: 16-37, 1917; E. HOOTON. *THE AMERICAN CRIMINAL*. Cambridge: Harvard University Press, 1939, pp. 18-31.

1. Use of the statistical method.

a. Low and insignificant correlations are frequently used as a basis for prediction.

b. Real differences between classes of criminals or between criminals and non-criminals are reduced to alleged insignificance by correcting the coefficients to remove the influence of irrelevant sociological and physical features.

c. The validity of the original data is impugned when differences, which Goring did not desire to obtain, were irreducible by statistical correction.

d. Certain characters were roughly rather than precisely measured. For example, the intelligence of criminals was determined not by the use of the Simon-Binet metrical scale, which was available, but by the investigator's impression of whether the criminal was intelligent, slightly intelligent, mentally weak, or imbecilic.

e. Only in a very few instances were non-criminals compared with criminals; and, when they were, they were not legitimately comparable because they represented sections of the general community from which criminals do not usually come. Further, non-criminals were measured by different techniques.

f. The statistical technique is not an adequate device for laying bare all of the characteristics of the criminal. Lombroso had stated that many of them are internal and microscopic and that only a competent anthropologist can discover them. Lombroso in 1889 proved this to Manouvrier and Topinard by pointing to anomalies that Magnan, the famous alienist, had failed to detect.

2. Definitions

a. The distinction between the "abnormal" and the "unusual" is too arbitrary. It is simply a verbal preference to hold out for the use of the statistician's "unusual" rather than the pathologist's "abnormal" when speaking of forms of infantilism, gigantism, disgenitalism, etc.

b. The concept "environment" is narrowly construed.

c. The consideration of insanity and epilepsy as strictly constitutional in origin is questionable.

3. The Diathesis

a. Goring, by assuming the diathesis to be present in all men, exempted himself from explaining the act of crime and examined only the why of conviction and imprisonment.

b. In order to account for the diathesis in strictly constitutional terms, it was necessary to introduce the element of moral defectiveness and assume it to be constitutional.

Goring anticipated criticisms of his work but hoped that they would motivate others to extend and surpass his findings. He states: "Our tables of figures speak for themselves, we have said: but we do not claim that they utter the last word. The finality of any verdict of ours depends, of course, upon the accuracy and representativeness of the statistics from which it has been gathered . . .

"We believe that our results do give the general drift of the facts. If these results serve as a stimulus to a more extended inquiry, we shall have achieved our principle object."²³

REFERENCES

1. Charles B. Goring, 1870-1919. *Obituary Notice and Appreciation*. BIOMETRIKA, XII: 297-307, Nov. 1918-Dec. 1919.
2. Charles Buckman Goring, THE LANCE, CXCVI: 914, 1919.
3. GINA LOMBROSO FERRERO, ENRICO FERRI, SANTE DE SANCTIS, WILLIAM A. WHITE, H. D. NEWKIRK, AND PAUL BOWERS. *Charles Goring's The English Convict: A Symposium*, JOUR. OF CRIM. LAW AND CRIMINOL., V: 207-240, 348-363, 1914-1915.
4. BRYAN DONKIN. *Notes on Mental Defect in Criminals*, JOUR. OF MENT. SCI., LXIII: 16-37, 1917.
5. BRYAN DONKIN. *The Factors of Criminal Actions*, JOUR. OF MENT. SCI., XLV: 87-96, 1919.

²³ GORING, *op. cit.*, p. 373.

6. CHARLES GORING. THE ENGLISH CONVICT: A STATISTICAL STUDY. London: His Majesty's Stationery Office, 1913.
7. CHARLES GORING. *The Etiology of Crime*, JOUR. OF MENT. SCI., LXIV: 129-146, 1918.
8. J. ARTHUR HARRIS. *Charles Buckman Goring*, SCI. n.s., LI: 133-134, Jan.-June, 1920.
9. E. HOOTON. THE AMERICAN CRIMINAL. Harvard University Press, 1939, pp. 18-31.
10. MAURICE PARMALEE. CRIMINOLOGY. Macmillan, 1920.
11. THORSTEN SELLIN. *Charles Buckman Goring*, ENCYCLOPEDIA OF SOCIAL SCIENCES, Edited by EDWIN R. A. SELIGMAN AND ALVIN JOHNSON. Macmillan, 1931, VI, p. 703.